Listing of Claims

1. (Currently Amended) A method of determining the position of an object ~~(4)~~ in an image ~~(I)~~, wherein a pattern of marking elements ~~(6)~~, which are not visibly evident individually in the image ~~(I)~~, is attached to the object ~~(4)~~.

2. (Currently Amended) A method as claimed in claim 1, ~~characterized in that~~ wherein the position of the marking elements ~~(6)~~ in the image ~~(I)~~ is determined by a correlation of the image ~~(I)~~ with at least one filter image ~~(M)~~ of the pattern of the marking elements.

3. (Currently Amended) A method as claimed in claim 2, ~~characterized in that~~ wherein the filter image ~~(M)~~ of the pattern is transformed relative to the actual pattern of the marking elements.

4. (Currently Amended) A method as claimed in claim 1, ~~characterized in that~~ wherein the image ~~(I)~~ is generated by means of radioscopy, and the marking elements ~~(6)~~ exhibit a low absorption of the X-rays, the effect of which lies within the noise level of the X-ray image.

5. (Currently Amended) A method as claimed in claim 1, ~~characterized in that~~ wherein the position of at least one further object is determined in the image ~~(I)~~, wherein a second pattern of marking elements, which do not show up individually in the image, is attached to the further object, and wherein the second pattern is different from the first pattern.

6. (Currently Amended) Marking means ~~(5)~~ for attaching to an object ~~(4)~~ in order to determine its position in an image ~~(I)~~, wherein the marking means ~~(5)~~ comprise marking elements ~~(6)~~ arranged in a pattern, which are not visibly evident individually in the image ~~(I)~~.

7. (Currently Amended) Marking means as claimed in claim 6, ~~characterized in that~~ wherein the marking elements ~~(6)~~ are applied to a transparent carrier.

8. (Currently Amended) Marking means as claimed in claim 6, ~~characterized in that~~wherein the pattern of marking elements ~~(6)~~ is a two-dimensional maximum-length sequence.

9. (Currently Amended) An X-ray system, comprising

- ~~A~~an X-ray source ~~(1)~~ generating a ray path;
- ~~A~~an X-ray detector ~~(3)~~, which is disposed in the ray path of the X-ray source ~~(1)~~;
- ~~A~~at least one marking means ~~(5)~~ for attachment to an object ~~(4) located between the X-ray source (1) and the X-ray detector (3)~~ in order to determine ~~its~~the position of the object in an X-ray image ~~(I)~~, wherein the marking means ~~(5)~~ comprise marking elements ~~(6) arranged in a pattern~~, which are not visibly evident individually in the X-ray image ~~(I)~~.
- ~~A~~a data processing unit ~~(2)~~ for calculation of the position of the marking means ~~(6)~~ in an image ~~(I)~~ generated with the X-ray system.

10. (Currently Amended) An X-ray system as claimed in claim 9, ~~characterized in that~~wherein it is set up to implement a method as claimed in ~~at least any one of~~ claims 1 ~~to~~ 5.

11. (New) The X-ray system as claimed in claim 9, wherein said marking elements are arranged in a pattern.

12. (New) The X-ray system as claimed in claim 9, wherein said pattern is a two dimensional, cyclical binary maximum length sequence.

13. (New) The X-ray system as claimed in claim 9, wherein said marking elements are applied to a transparent carrier.